

## CLAIMS

What is claimed is:

1. An image apparatus with batch scan and real time display,  
5 comprising:

a scanner for scanning a document to be scanned;

a memory for storing said document that processing through  
said scanner;

a signal control device for displaying a notify signal to notice  
10 the user displaying said document on a display device when said  
document stores in said memory through said scanner; and

a switch control device for receiving a starting signal to  
display said document on said display device, and noticing said  
scanner proceeding to scan next document.

15 2. The apparatus according to claim 1, further comprising a  
transmission device transmitting said document to be scanned into  
said scanner.

20 3. The apparatus according to claim 2, wherein said  
transmission device is selected from the group consisting of positive  
photograph holder, negative photograph holder, and ADF (automatic  
document feeder).

4. The apparatus according to claim 1, wherein said memory is selected from the group consisting of ring buffer and ping-pong buffer.

5 5. The apparatus according to claim 4, wherein said memory comprises two memory buffer blocks at least, and the capacity of said memory is determined by user.

6. The apparatus according to claim 1, further comprising a  
10 display switch for receiving a notify signal and displaying said notify signal on said display device for informing user to display said document.

15 7. The apparatus according to claim 1, wherein said notify signal is selected from the group consisting of arrow image, twinkling image and unlike color image.

20 8. The apparatus according to claim 1, wherein said display device is selected from the group consisting of television, monitor, liquid crystal display and projector.

9. An image apparatus with batch scan and real time display, comprising:

a scanner for scanning first document to be scanned;

a transmission device for transmitting said first document to be scanned into said scanner;

a memory for storing said first document that processing through said scanner;

5 a signal control device for producing a notify signal when said first document stores in said memory through said scanner;

a display switch for receiving a notify signal and displaying said notify signal on said display device for informing user to display said first document; and

10 a switch control device for receiving a starting signal to display said first document on said display device, and noticing said transmission device transmitting second document into said scanner to going on.

15 10. The apparatus according to claim 9, wherein said transmission device is selected from the group consisting of positive photograph holder, negative photograph holder, and ADF (automatic document feeder).

20 11. The apparatus according to claim 9, wherein said memory is selected from the group consisting of ring buffer and ping-pong buffer.

12. The apparatus according to claim 11, wherein said

memory comprises two memory buffer blocks at least, and the capacity of said memory is determined by user.

13. The apparatus according to claim 9, wherein said notify signal is selected from the group consisting of arrow image, twinkling image and unlike color image.

14. The apparatus according to claim 9, wherein said display device is selected from the group consisting of television, monitor, liquid crystal display and projector.

15. A scanning method with synchronous scan and display, comprising:

scanning a document and storing said document into a memory;

displaying a notify signal to notice the user displaying said document on a display device; and

utilizing a switch control device for receiving a starting signal to display said document on said display device, and scanning a next document simultaneously.

16. The method according to claim 15, further comprising a transmission device transmitting said document to be scanned into said scanner.

17. The method according to claim 16, wherein said transmission device is selected from the group consisting of positive photograph holder, negative photograph holder, and ADF (automatic document feeder).

18. The method according to claim 15, wherein said memory is selected from the group consisting of ring buffer and ping-pong buffer.

19. The method according to claim 18, wherein said memory comprises two memory buffer blocks at least, and the capacity of said memory is determined by user.

20. The method according to claim 15, further comprising a display switch for receiving a notify signal and displaying said notify signal on said display device for informing user to display said document.

21. The method according to claim 20, wherein said notify signal is selected from the group consisting of arrow image, twinkling image and unlike color image.

22. The method according to claim 15, wherein said display

device is selected from the group consisting of television, monitor, liquid crystal display and projector.

23. A scanning method with synchronous scan and display,  
5 comprising:

utilizing a transmission device to transmitting first document into a scanner;

scanning said first document and storing said first document into a memory;

10 displaying a notify signal on a display device to notice the user displaying said document on said display device; and

utilizing a switch control device for receiving a starting signal to display said first document on said display device, and noticing said transmission device transmitting second document into said  
15 scanner to going on simultaneously.

24. The method according to claim 23, wherein said transmission device is selected from the group consisting of positive photograph holder, negative photograph holder, and ADF (automatic  
20 document feeder).

25. The method according to claim 23, wherein said memory is selected from the group consisting of ring buffer and ping-pong buffer.

26. The method according to claim 25, wherein said memory comprises two memory buffer blocks at least, and the capacity of said memory is determined by user.

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27. The method according to claim 23, wherein said notify signal is selected from the group consisting of arrow image, twinkling image and unlike color image.

28. The method according to claim 23, wherein said display device is selected from the group consisting of television, monitor, liquid crystal display and projector.

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